JC14 Rec'd PCT/PTO 23 SEP 2005

BRINKS
HOFER
GILSON
& LIONE

Intellectual Property Law Worldwide

G. Peter Nichols

312-321-4287

E-mail: gpnichols@brinkshofer.com

September 2, 2005

VIA FACSIMILE TRANSMISSION 703.305.3230

Derris H. Banks
Authorized Officer
USPTO
Mail Stop PCT, ATTN: ISA/US
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Re: International Application No. PCT/US04/009232

Title: SELF-LOCKING DRILL CHUCK

APPLICANT: Shandong Weida Machinery Company Limited

International Filing Date: March 25, 2004

Attorney Docket: 12466/5

Dear Mr. Banks:

In response to the PCT Written Opinion, Applicant encloses a Response to the Written Opinion, which includes a new page 5 containing claim amendments and a copy of PCT/IB/304, Notification Concerning Submission or Transmittal of Priority Document.

Respectfully submitted,

G. Peter Nichols
Attorney for Applicant

GPN/am

* TIPE 12:210./550637 жижной кононом и рате SEP-02-2005

MODE = MEMORY TRANSMISSION

FILE NO. =350

STN NO. COMM. ABBR NO.

STATION NAME/TEL NO.

DURATION PAGES

001

ΠK

17033053230

005/005 00:01:25

-BHGL CHICAGO

живороживающего живот в тороживающего в тороживающего живот на тороживающего живот в тороживающего живот в тороживающего живо живот в тороживающего живот

G. Peter Nichols 312-321-4287 E-mail: gpnichols@brinkshofer.com BRINKS HOFER GILSON

Law Worldwide

September 2, 2005

VIA FACSIMILE TRANSMISSION 703.305.3230

Derris H. Banks **Authorized Officer USPTO** Mail Stop PCT, ATTN: ISA/US **Commissioner for Patents** P.O. Box 1450 Alexandria, VA 22313-1450

International Application No. PCT/US04/009232

Title: SELF-LOCKING DRILL CHUCK

APPLICANT: Shandong Weida Machinery Company Limited

International Filing Date: March 25, 2004

Attorney Docket: 12466/5

Dear Mr. Banks:

In response to the PCT Written Opinion, Applicant encloses a Response to the Written Opinion, which includes a new page 5 containing claim amendments and a copy of PCT/IB/304, Notification Concerning Submission or Transmittal of Priority Document.

Respectfully submitted

G. Peter Nichols

Attorney for Applicant

GPN/am

VIA Facsimile 703.305.3230

USPTO

CASE NO. 10225/51 (A21)

THE INTERNATIONAL SEARCHING AUTHORITY PATENT COOPERATION TREATY

Applicar	nt: Shandong Weida Machinery) Company Limited)	
Internati Applicat	onal) ion No.: PCT/US2004/009232)	
Internati Filing Da	onal) ate: 25.03.2004)	
For: S	; ELF-LOCKING DRILL CHUCK	

RESPONSE PURSUANT TO ARTICLE 34 AND RULE 66

Dear Examiner Banks:

The present response is being made in accordance with Article 34 and Rule 66.

As an initial matter, Box No. II of the Written Opinion indicates that the copy of the earlier application whose priority has been claimed had not yet been furnished.

Applicant attaches for the Examiner's convenience a Notification received from the International Bureau that indicates receipt of the priority document.

Turning to the Written Opinion, pursuant to Rule 66.8(a), please replace current page 5 with amended page 5. The present claims are novel and provide an inventive step over US 6,659,474. In particular, the claims now require that the chuck include a gear wheel fixed to a portion of the chuck body axially rearward of the nut and having a plurality of spaced teeth about a periphery of the gear wheel; a nut sleeve fixed to the nut and having a forward portion and a rearward portion, the nut sleeve further including

PCT/US2004/009232 WO 2005/009656

at least one pawl extending from the rearward portion; a front sleeve surrounding at least a portion of the body; and, a rotational sleeve annularly disposed between the front sleeve and the nut sleeve, the rotational sleeve having at least one protruding stopper, wherein when the rotational sleeve is in a first position at least one portion of the at least one pawl engages at least a portion of the gear wheel between adjacent teeth.

These features are neither shown nor taught in US 6,659,474 and therefore, the present claims are novel and represent an inventive step over the cited art. If the Examiner feels that it would be useful to discuss this application with the agent of record, he can be reached at 312.321.4276.

Respectfully submitted,

G. Peter Nichols

Agent for Applicant

BRINKS HOFER GILSON & LIONE P.O. Box 10395 Chicago, IL 60610 (312) 321-4200 WO 2005/009656 PCT/US2004/009232

- 1. A self-locking drill chuck comprising:
- a. a generally cylindrical body defining an axis and having a forward portion and rearward portion, the body having a plurality of inclined holes extending obliquely to the axis and converging toward the front portion;
- b. a plurality of jaws corresponding to the plurality of holes, each jaw being slidably disposed within a respective hole and including a thread section along an outer surface;
- c. a nut rotatable about the body and configured to engage the thread section of the jaws;
- d. a gear wheel fixed to a portion of the chuck body axially rearward of the nut and having a plurality of spaced teeth about a periphery of the gear wheel;
- e. a nut sleeve fixed to the nut and having a forward portion and a rearward portion, the nut sleeve further including at least one pawl extending from the rearward portion;
 - f. a front sleeve surrounding at least a portion of the body; and,
- g. a rotational sleeve annularly disposed between the front sleeve and the nut sleeve, the rotational sleeve having at least one protruding stopper, wherein when the rotational sleeve is in a first position at least one portion of the at least one pawl engages at least a portion of the gear wheel between adjacent teeth.
- 2. The self-locking chuck of claim 1 further comprising two pawls provided on the nut sleeve.
- 3. The self-locking chuck of claim 1 wherein the pawl has a v-shaped bend.
- 4. The self locking chuck of claim 3 wherein the pawl is slightly convex.

From the INTERNATIONAL BUREAU

NOTIFICATION CONCERNING SUBMISSION OR TRANSMITTAL OF PRIORITY DOCUMENT

(PCT Administrative Instructions, Section 411)

NICHOLS, Peter, G. Brinks Hofer Gilson & Lione P.O. Box 10087 Chicago, IL 60610 ETATS-UNIS D'AMERIQUE

Date of mailing (daymonth/year) 18 February 2005 (18.02.2005)	
Applicant's or agent's file reference 12466-5	IMPORTANT NOTIFICATION
International application No. PCT/US04/009232	International filing date (day/month/year) 25 March 2004 (25.03.2004)
International publication date (day/month/year) 03 February 2005 (03 02.2005)	Priority date (day/month/year) 25 March 2003 (25.03.2003)
Applicant SHANDONG WEIDA	MACHINERY COMPANY LIMITED et al

- 1. By means of this Form, which replaces any previously issued notification concerning submission or transmittal of priority documents, the applicant is hereby notified of the date of receipt by the International Bureau of the priority document(s) relating to all earlier application(s) whose priority is claimed. Unless otherwise indicated by the letters NR, in the right-hand column or by an asterisk appearing next to a date of receipt, the priority document concerned was submitted or transmitted to the International Bureau in compliance with Rule 17.1(a) or (b).
- 2. (If applicable) The letters "NR" appearing in the right-hand column denote a priority document which, on the date of mailing of this Form, had not yet been received by the International Bureau under Rule 17:1(a) or (b) Where under Rule 17:1(a), the priority document must be submitted by the applicant to the receiving Office or the International Bureau, but the applicant fails to submit the priority document within the applicable time limit under that Rule, the attention of the applicant is directed to Rule 17.1(c) which provides that no designated Office may disregard the priority claim concerned before giving the applicant an opportunity, upon entry into the national phase, to furnish the priority document within a time limit which is reasonable under the circumstances.
- 3. (If applicable) An asterisk (*) appearing next to a date of receipt, in the right-hand column, denotes a priority document submitted or transmitted to the International Bureau but not in compliance with Rule 17:1(a) or (b) (the priority document was received after the time limit prescribed in Rule 17.1(a) or the request to prepare and transmit the priority document was submitted to the receiving Office after the applicable time limit under Rule 17.1(b)) Even though the priority document was not furnished in compliance with Rule 17.1(a) or (b), the International Bureau will nevertheless transmit a copy of the document to the designated Offices, for their consideration. In case such a copy is not accepted by the designated Office as the priority document. Rule 17.1(c) provides that no designated Office may disregard the priority claims concerned before giving the applicant an opportunity, upon entry into the national phase, to furnish the priority document within a time limit which is reasonable under the circumstances.

Priority_date Priority_application_No. Country or regional Office Date of receipt or PCT receiving Office of priority document 25 March 2003 (25.03.2003) 03216881.0 CN 28 January 2005 (28.01.2005)

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Authorized officer

Gaud Carole

Facsimile No. +41 22 338 70 80 Telephone No. +41 22 338 8227

Facsimile No. +41 22 740 14 35

Form PCT/IB/304 (January 2004)